

Remarks

Claims 13-26 are pending. Claims 23-26 have been withdrawn from consideration. Claims 18-22 have been allowed. Applicants gratefully acknowledge the Examiner's indication of allowable subject matter. Reconsideration is requested in view of the following remarks.

Claims 13 and 16 are rejected under 35 U.S.C. 102(b) over Luehrs et al. (US 2,775,934), hereafter "Luehrs." This rejection is defective because Luehrs fails to disclose each and every feature of the claims as required by 35 U.S.C. 102(b).

Independent claim 13 sets forth a "printing apparatus for printing an image on a receiving substrate, wherein the printing apparatus comprises: an ink applicator for imagewise applying liquid ink to a side of the receiving substrate; a drying section having an active drying device for active drying of the receiving substrate after said ink application; a transportation device for transporting the receiving substrate along a path past said ink applicator and through said drying section; wherein said path includes a first substantially straight portion at said ink applicator, and a first and a second convex curve in said drying section, said first and second convex curve separated

by a second substantially straight portion."

In the Office Action, the Examiner alleges that the claimed feature of a first substantially straight portion at said ink applicator "reads on the lateral 'straight' contact line formed by the nip of the Fig. 4 impression cylinder 26 with the plate ink applying cylinder 28" disclosed by Luehrs. Applicants respectfully disagree with the Examiner's analysis, and submit that the contact area between the impression cylinder 26 and the plate ink applying cylinder 28 disclosed by Luehrs cannot be considered as a "substantially straight portion" as claimed. It should be noted that the impression cylinder 26 and plate ink applying cylinder 28 cited by the Examiner are illustrated in FIGS. 5, 5a, 6, 6a, and do not appear in FIG. 4.

In rotary presses, either the impression cylinder (e.g., in offset printing) or the form cylinder (e.g., in rotogravure printing) is made of a hard material such as steel or copper, while the other cylinder is to some extent compressible (e.g., manufactured from a rubber-like material). As such, at the contact area between the two cylinders, the softer cylinder conforms to the circumference of the harder cylinder. Consequently, this contact area in a rotary press is not a substantially straight portion as

claimed, but a curved portion that follows the curvature of the harder of the two cylinders.

The Examiner further alleges that the "wrap around path of the transported sheets around steam and water cylinders 31-32 read on the convex claims limitation." Applicants again disagree with the Examiner's analysis.

In Luehrs, the two cylinders, steam cylinder 32 and water cylinder 31, of the drying unit do not constitute two convex curves. As defined in the specification of the present patent application, a "convex curve" is a curve for which the printed side of the substrate is at the outside of the curve (see, e.g., page 5, lines 16-19). The steam cylinder 32 in Luehrs, however, is not a "convex curve" as claimed because the printed side of the substrate is at the **inside** of the curve, i.e., facing the cylinder, when transported around the steam cylinder.

As detailed above, Luehrs differs from the claimed invention, in at least two features:

- (1) there is no substantially straight portion in the transportation path along the ink applicator, and
- (2) there is only one convex curve in the drying section.

Accordingly, because Luehrs does not disclose each and every feature of claim 13, Applicants submit that claims 13-17 are

allowable.

Claims 13 and 15-17 are rejected under 35 U.S.C. 103(a) over Luehrs in view of Rezanka (US 5,757,407). Claim 14 is rejected under 35 U.S.C. 103(a) over Luehrs in view of DeMoore et al. (US 5,651,316), hereafter "DeMoore." These rejections are defective because Luehrs, Rezanka, and DeMoore, taken alone or in any combination, fail to disclose each and every feature of the claims as required by 35 103(a).

Rezanka fails to disclose a path through a drying section containing two convex curves with a substantially straight portion therebetween. On the contrary, Rezanka discloses that the drying zone 43 is defined by the location of the dryer 42 (see, e.g., col. 5, lines 14-15). Unlike the convex curves of claim 13 of the present patent application, the rollers 22 of Rezanka are not within the drying zone. Rather, Rezanka discloses a path through a drying section that is either a straight path as illustrated in FIGS. 1 and 2, or a single convex curved path as illustrated in FIG. 3.

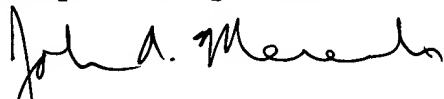
DeMoore discloses a delivery conveyer system 44 for conveying freshly printed sheets from the last impression cylinder 36 to the sheet delivery stacker 20 (see, e.g., col. 6, lines 36-47). Prior to reaching the delivery sheet

stacker 20, the freshly printed sheets are passed under a delivery dryer 48 (see, e.g., col. 6, lines 49-54). The freshly printed sheets follow a straight path through the dryer 48. There is no suggestion in DeMoore of using convex curves in the path through the dryer 48.

For the reasons set forth above, Applicants submit that claim 13, and its dependent claims 14-18, are patentable over Luehrs, Rezanka, and DeMoore, taken alone or in any combination.

If the Examiner believes that any further discussion of the invention would be helpful, perhaps in the form of an Examiner's Amendment, Applicants' representative is available at (518) 449-0044, and earnestly solicits such discussion.

Respectfully submitted,



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